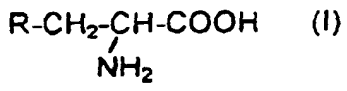
CLAIMS

1. Method for detecting and identifying and/or quantifying an enzymatic activity such as deaminase activity of a microorganism, according to which an inoculum which is capable of containing a microorganism with a deaminase activity is brought into contact with a culture medium for microorganisms,

characterized in that the culture medium comprises at least one detection agent for demonstrating, by forming a colored product with a revealing agent, an enzymatic activity such as deaminase activity;

said detection agent is a cyclic L-amino acid of following general formula (I):



in which:

- R represents a cyclic amino acid radical, substituted with 1 to 3 groups X, which are identical or different,
- X represents a group which limits the diffusion of the α-keto acid produced by the deamination of the cyclic amino acid,

the compound of formula (I) being able to be substituted with various groups which do not interfere with the function of the group X.

2. Method according to claim 1, characterized in that the revealing agent is a cation salt.

3. Method according to claim 1, characterized in that the revealing agent is added to the culture medium at the same time as the detection agent.

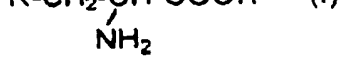
4. Method according to claim 1, characterized in that the revealing agent is added to the culture medium after culturing the microorganisms.

5. Method according to claim 1, characterized in that the microorganisms which are detected and

identified and/or quantified by enzymatic activity such as deaminase activity belong to the group *Proteus*.

6. Method according to claim 1, characterized in that at least one other detection agent for demonstrating, by forming a colored or fluorescent product, an enzymatic activity which is different from that demonstrated by the compound of general formula (I) is also added to said culture medium.

7. Compound having the following general formula (I):



(I)

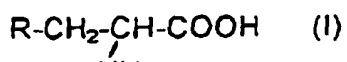
in which:

- R represents a cyclic amino acid radical, substituted with 1 to 3 groups X, which are identical or different,
- X represents a group which limits the diffusion of the α-keto acid produced by the deamination of the cyclic amino acid,

the compound of formula (I) being able to be substituted with various groups which do not interfere with the function of the group X,

with the exception of the compounds im-benzyl-L-histidine, 1- and 3-methyl-L-histidine, O-benzyl-L-tyrosine, O-carboxybenzoyl-L-tyrosine, O-dansyl-L-tyrosine, O-methyl-L-tyrosine and 1-, 4-, 5-, 6- and 7-methyl-L-tryptophan.

8. Detection agent comprising at least one compound of following general formula (I):



(I)

in which:

- R represents a cyclic amino acid radical, substituted with 1 to 3 groups X, which are identical or different,

- X represents a group which limits the diffusion of the α-keto acid produced by the deamination of the cyclic amino acid,

the compound of formula (I) being able to be substituted with various groups which do not interfere with the function of the group X.

9. Detection agent according to claim 8, characterized in that R is substituted with a group X, and X is chosen from hydrophobic groups.

10. Detection agent according to claims 8 and 9, characterized in that X is chosen from naphthalene-sulfonyl, tosyl-sulfonyl and N-ind-metisylene-sulfonyl [sic].

11. Detection agent according to claim 9, characterized in that it is O-(2-naphthalene-sulfonyl)-tyrosine.

12. Detection agent according to claim 9, characterized in that it is 4-O-toluene-sulfonyl-L-tyrosine.

13. Detection agent according to claim 9, characterized in that it is N-toluene-sulfonyl-L-histidine.

14. Method for preparing the compounds according to claim 7 and the detection agents according to claim 8, comprising the following steps:

(a) - formylation of the residue R,

(b) - addition of a salt of X onto the residue R formylated according to (a),

(c) - deformylation of the residue R substituted according to (b).

15. Culture medium for microorganisms, comprising, besides the ingredients required for culturing said microorganisms, at least one detection agent according to any one of claims 8 to 13.

16. Culture medium according to claim 15, characterized in that the weight concentration of the detection agent(s) is between 0.025 and 5 g/l of culture medium.

17. Culture medium according to claims 15 and 16, characterized in that [lacuna] weight concentration of the detection agent(s) is between 0.1 and 2 g/l, preferably between 0.3 and 0.6 g/l.

18. Culture medium according to claim 15, characterized in that it also comprises a revealing agent, preferably a cation salt, for example ammoniacal iron citrate.

19. Culture medium according to claim 15, characterized in that it is in a gelled form.

20. Culture medium according to claims 15 to 19, characterized in that it also comprises at least one other detection agent for demonstrating, by forming a colored or fluorescent product, an enzymatic activity which is different from that demonstrated by the compound of general formula (I).

add A

add B5